

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Safety and Enforcement Division
Rail Transit Safety Branch

Resolution ST-175
May 7, 2015

RESOLUTION

RESOLUTION ST-175 GRANTING THE SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY A VARIANCE
FROM GENERAL ORDER 95, SECTION NOS. 78.3 (A) AND (C)

SUMMARY

This resolution grants the San Francisco Municipal Transportation Agency's request for a variance to General Order 95, Section Nos. 78.3 (A) and (C), Foreign Conductors, regarding the San Francisco *LightRail* public art project on Market Street. Specifically, San Francisco Municipal Transportation Agency is requesting a variance to install permanent continuous decorative lighting along each side of two miles of its trolley messenger wires along Market Street. General Order 95 only allows temporary decorative lighting to be installed on those lines. The requested variance is to allow a permanent installation of decorative lighting along Market Street. No variance is granted to the remainder of the requirements in General Order 95, Section Nos. 78.3 (A) and (C).

PROJECT DESCRIPTION

The San Francisco Municipal Transportation Agency (SFMTA) operates in the city and county of San Francisco. SFMTA rail transit modes include light rail vehicles, Historic Streetcars, Presidential Conference Committee cars, and cable cars which, combined, serve approximately 180,000 weekday riders. SFMTA operates street-running vehicles on Market Street from Steuart Street, ending just before Castro Street. There is also an underground light rail line along Market Street. SFMTA requests a variance to install a permanent decorative continuous string of programmed lights along each side of two miles of its trolley messenger wires along Market Street to accommodate

the *LightRail* public art project. The art project will visually represent the real-time movement of SFMTA's underground light rail trains along the Market Street corridor.

SFMTA seeks a variance from General Order (GO) 95, Foreign Conductors, Section Nos. 78.3 (A) and (C) in order to accommodate the art project and the possibility that the City of San Francisco (City) will want the installation to be permanent after the initial four-year implementation.

BACKGROUND

Although Illuminate the Arts (ITA) had made some informal contacts with the Safety and Enforcement Division (SED) staff (Staff), the CPUC was officially approached regarding this project in August of 2014, when ITA sent a letter to the Commission's Executive Director requesting approval to move forward with the project. ITA is a local organization that is also responsible for *The Bay Lights* art project, illuminating the west span of the Interstate 80 Bay Bridge. ITA indicated it could comply with all of the GO 95 requirements regarding decorative lighting attached to trolley system support wires. After internal Staff discussions it was determined that the project needed Commission approval.

Staff, Parsons Brinkerhoff (providing technical support to ITA), and the SFMTA Overhead Line Department met on October 28, 2014, at the CPUC offices to discuss the proposed lighting configuration in further detail. Additionally, ITA subsequently had additional meetings with SFMTA, San Francisco Department of Public Works and the San Francisco Fire Department regarding the specifics of its proposed *LightRail* arts project. ITA and Parsons-Brinkerhoff incorporated Staff's and the other agency/department's concerns and recommendations into the project.

On November 19, 2014, ITA sent a letter to the SFMTA Superintendent of Overhead Lines seeking approval and his positive recommendation to SFMTA and other City departments, as well as CPUC regarding ITA's proposed Market Street *LightRail* art project. On December 5, 2014, SFMTA sent a letter to Rail Transit Safety Branch (RTSB) Staff of the SED stating that, after reviewing the ITA proposal, the SFMTA Overhead Department believes the proposal would allow the decorative lighting to be installed and maintained safely.

Subsequently, on February 25, 2015, SFMTA sent a letter to Staff requesting approval of the project. SFMTA stated the likelihood that the City would want the decorative lighting to remain in place after the initial four-year period, and has requested a variance from the word “temporary” in GO 95, Section Nos. 78.3 (A) and (C), in order to maintain the lighting on a permanent basis.

DISCUSSION

GO 95, Section Nos. 78.3 (A) and (C) state:

Foreign Conductors

The following rules shall apply to decorative lighting fixtures, decorative lighting circuits, decorative garlands, and all other apparatus used for decorative purposes, where supported by and attached to the lines of trolley systems and when special permission for such supports and attachments has been secured from the trolley systems concerned.

Nothing herein contained shall be construed as requiring utilities to grant permission for such use of their overhead facilities; or permitting any use of joint poles or facilities for such temporary construction without the consent of all parties having any ownership whatever in the poles to which attachments may be made; or granting authority for the use of any poles or facilities without the owner’s or owners’ consent.

A. *Attachment to Span Wires*

(1) *Decorative Lighting Fixtures and Circuits:* *Decorative lighting fixtures and decorative lighting circuits of not more than 300 volts may be attached **temporarily** to trolley span wires provided that such equipment and appurtenances meet all of the following requirements:*

Circuit wires shall be rubber covered.

Wires shall be suitably insulated from (and in no case shall contact) the span wire.

Such equipment shall be placed only between the pole (or other support in lieu thereof) and the span wire insulator nearest the suspension of the trolley contact conductor, and No energized part of such equipment shall be less than 18 feet above the street surface.

It is recommended that no attachment be made to energized portions of feeder span wires. However, if such attachment is permitted by the utility the insulators and rubber covered wire used shall be capable of withstanding the trolley voltage.

(2) Decorative Garlands and Other Unenergized Decorations: ...

C. Attachment of Auxiliary Span Wires to Poles Supporting Trolley Contact Conductors

*Auxiliary span wires for the support of decorative lighting fixtures, decorative lighting circuits, decorative garlands, and any other apparatus used for **temporary** decorative purposes are strictly prohibited except when special permission is secured from this Commission. Under such permission the auxiliary span wire shall comply with all of the following requirements:*

It shall be sectionalized, by means of insulators, in accordance with the rules applicable to overhead guys,

The span wire and conductors and any apparatus attached thereto shall be installed and maintained not less than 4 feet above the level of the trolley contact conductors and not less than 4 feet below any conductor in excess of 750 volts,

The span wire shall provide an ultimate strength of not less than that afforded by 3/8 inch common galvanized- steel strand, and

The additional mechanical loads on poles resulting from such installation shall not be such that the requirements of Section IV are not maintained.

No permits issued by Municipal or County Inspection Departments, or any trolley line system or other utility, shall be construed to permit the use of auxiliary span wires attached to poles supporting span wires of electric trolley systems, other than those auxiliary span wires which shall comply with all conditions set forth above.

* * * *

ITA and SFMTA indicate they can comply with all requirements of these sections of GO 95, but request specific relief from the word “temporary” (emphasis added as highlighted in bold, above) in both sections, to allow for a permanent installation. Additional considerations in support of approval include:

1. The decorative lighting equipment and appurtenances are lightweight and under low tension;
2. The lines and their messenger support wires will all be over 18 feet from the ground surface as required by GO 95;
3. The lighting facilities will be supported by a non-conductive 0.51-inch Phillystran messenger wire; and
4. The lighting system will use break-away connectors to allow quick and easy access by fire department personnel to buildings and structures.

The project and SFMTA request are supported by the following documents included as an attachment to this Resolution:

- Parsons Brinkerhoff, Light Rail Project Electrical Plan L-OCS-003-(1-4)
- Parsons Brinkerhoff, Light Rail Project Electrical Plan OCS-(001-003)
- Illuminate The Arts letter dated November 19, 2014, addressed to SFMTA
- Light Rail SF Historic Preservation Committee dated June 18, 2014, Path of Gold Maintenance Plan
- Light Rail SF Historic Preservation Committee, dated June 18, 2014, Overall Light Rail Maintenance Plan
- Parsons Brinkerhoff, Light Rail Project Electrical Plan, E-029
- SFMTA letter dated December 5, 2014, addressed to CPUC
- SFMTA letter dated February 25, 2015, addressed to CPUC

Based on the proposed configuration, Staff has determined that a variance from GO 95, Section Nos. 78.3 (A) and (C) to allow the decorative lighting facilities on a permanent basis would not compromise safety. The proposed *LightRail* decorative lighting project is sound in design and meets GO requirements in all other respects. Staff recommends approval of this Resolution and the requested variance.

NOTICE

On March 30, 2015, SFMTA's variance request was published on the Commission's Daily Calendar.

COMMENTS

The draft resolution of the SED in this matter was mailed in accordance with Section 311 of the Public Utilities Code and Rule 14.2(c) of the Commission's Rules of Practice and Procedure. No comments were received.

FINDINGS

1. ITA has proposed a decorative lighting public art project, the *LightRail* project, along 2.1 miles of Market Street in downtown San Francisco that would create real-time representations of the movement of SFMTA underground light rail trains along the Market Street corridor.
2. ITA has gained support for its project from civic and community organizations including SFMTA, the San Francisco Public Utilities Commission, the San Francisco Planning Department, the San Francisco Arts Commission and the San Francisco Mayor's office.
3. By a letter dated November 19, 2014, ITA requested SFMTA approval of its proposed project and SFMTA support for a variance from CPUC for GO 95, Foreign Conductors, Section Nos. 78.3 (A) and (C), regarding a permanent versus temporary installation, for its proposed *LightRail* lighting project.
4. The plans for the project have been reviewed by CPUC Staff, SFMTA Overhead Lines Department, the San Francisco Fire Department and Parsons Brinkerhoff.
5. The decorative lighting facilities and appurtenances are lightweight and the supporting messenger wire will be under low tension, resulting in minimal effect on the SFMTA facilities.
6. The decorative lighting lines will be over 18 feet in height, never crossing the Overhead Catenary System conductor, insulated from the system by current insulators, include break away connectors (for fire department access) and connected to 0.51-inch Phillystran non-conducting messenger wire for support.

7. RTSB Staff and the SFMTA Overhead Lines Department agree the decorative lighting can be installed and maintained safely and pose no danger to the public if properly maintained.

THEREFORE, IT IS ORDERED THAT:

1. San Francisco Municipal Transportation Agency's variance request to General Order (GO) 95, Sections Nos. 78.3 (A) and (C) allowing for the permanent installation of Foreign Conductors for the *LightRail* art project is granted. The remainder of GO 95, Section Nos. 78.3 (A) and (C) remain in force.
2. San Francisco Municipal Transportation Agency, Illuminate the Arts, and any contractors or consultants involved in the project must comply with all other applicable rules and regulations, including Commission General Orders.
3. Agreements between San Francisco Municipal Transportation Agency and Illuminate the Arts, (and any other parties involved) must be provided to Commission Staff prior to installation.
4. Decorative lighting installation and maintenance workers must be trained and qualified to work in proximity to trolley conductors and in traffic prior to installation. The certifications of workers are subject to verification by Commission Staff.
5. Final design drawings must be provided to Commission Staff for review prior to installation.
6. Prior to turning the decorative lighting on (other than for testing), San Francisco Municipal Transportation Agency and Illuminate the Arts representatives shall notify Commission Staff and must accompany Commission Staff during a field survey to verify compliance with this Resolution and all CPUC rules and regulations.
7. Annual inspections by San Francisco Municipal Transportation Agency must specifically review the decorative lighting wires and appurtenances for continued compliance.

8. San Francisco Municipal Transportation Agency and Illuminate the Arts shall address any compliance or safety issues identified by the inspections or by Commission Staff inspections and surveys.
9. This resolution is effective today.

I certify that this resolution was adopted by the Public Utilities Commission at its regular meeting held on May 7, 2015. The following Commissioners voting favorably thereon:

TIMOTHY SULLIVAN
Executive Director

ATTACHMENT